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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/954,523	09/12/2001	Brantley W. Coile	CISCP005C1	8750

7590 08/13/2004

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EXAMINER

BLAIR, DOUGLAS B

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/954,523

Applicant(s)

COILE ET AL.

Examiner

Douglas B Blair

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/9/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Claims 1-3, 5, and 22 are currently pending in this application.

Terminal Disclaimer

2. The terminal disclaimer filed on 5/24/2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent Number 6,317,775 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,774,660 to Brendel et al. in view of U.S. Patent Number 5,459,837 to Caccavale et al.

Brendel teaches a system for distributing connections from clients on an external network to a plurality of servers on an internal network, the system comprising:

a client interface to the external network the client interface being operative to receive and send packets to and from a remote client (Figure 4, element 10);

a server interface to the internal network, the server interface to the internal network, the server interface being operative to receive and send packets to and from a plurality of servers, the plurality of servers being operative to establish a connection with the remote client and the system being configured to monitor connections established between the plurality of server and clients on the external network (Figure 4, element 32);

and selecting server based on the load (col. 6, lines 8-58).

Brendel does not specifically show the use of the predicted responsiveness indicators and comparing and selecting the best server based on the indicators.

Caccavale teaches a plurality of predicted responsiveness indicators, each of the plurality of predictive responsiveness indicators being associated with at least one of the plurality of servers, the predicted responsiveness indicators being operative to predict the response time of each of the plurality of servers based at least in part on response time data gathered at the system in the course of monitoring connections established between the plurality of server and clients on the external network, the predicted response time for each of the plurality of server being a function of the number of client connections to a particular server, the predicted responsiveness indicators also being stored within the system in a manner that the predicted responsiveness indicators may be accessed (col. 7, lines 1-20);

and a predicted responsiveness comparator which is operative to access and compare the predicted responsiveness indicators and to determine which servers from among the plurality of servers is associated with a predicted responsiveness indicator which measures a best predicted

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response time, the predicted responsiveness comparator being further operative to select a pointer to a server which has a predicted responsiveness that is the best predicted responsiveness among the predicted responsiveness of the plurality of servers (col. 4, lines 12-47);

whereby the server which has a predicted responsiveness which is the best predicted responsiveness is selected to handle the next connection from a client (col. 4, lines 35-47).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Brendel regarding the load balancing of connections with the teachings of Caccavale regarding predicting the responsiveness of connections because measuring responsiveness allows a system to more efficiently utilize network resources (Caccavale, col. 1, lines 31-47).

5. As to claim 2, Caccavale teaches a system wherein the predicted responsiveness indicators are periodically updated (col. 2, lines 37-45).
6. As to claim 3, Caccavale teaches a system wherein the predicted responsiveness indicators include the number of connections to each of the plurality of servers (col. 7, lines 1-20).
7. As to claim 5, Caccavale teaches a system wherein the predicted responsiveness indicators include the predicted response time of the plurality of servers (col. 7, lines 1-20).
8. As to claim 22, it features limitations rejected as part of claim 1 and therefore rejected for the same reasons as claim 1.

Response to Arguments

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9. Applicant's arguments filed 5/24/2004 have been fully considered but they are not persuasive. The applicant argues that Caccavale does not take into account a number of connections being handled by the servers as provided by the claimed invention. However, in Caccavale the server takes a baseline measurement during a period of low activity and then continues to take measurements of server response time periodically in order to figure out a predicted response time. The predicted response time in Caccavale is a function of the number of client connections because as Caccavale periodically measures response times for the server as the number of clients connected is changing.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas B Blair whose telephone number is 703-305-5267. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 703-305-9705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Douglas Blair

DBB


JACK B. HARVEY
SUPERVISORY PATENT EXAMINER